



Supplementary Figure 1. Graphs of the currently implemented (A) federal and (B) state harvest control rules (HCRs) for golden king crab (*Lithodes aequispinus*) in the eastern Aleutian Islands. The federal stock assessment establishes the overfishing level on the basis of an HCR that is a function of instantaneous fishing mortality ( $F$ ), shown in decimal form by year, and mature male biomass (MMB), shown in metric tons (t). The candidate state HCRs (HR10, HR15, and HR30) determine discrete exploitation rates, shown in decimal form, as a function of mature male abundance (MMA), shown in number of crab. The directed pot fishery closes when MMA or MMB reaches a proportion of 0.25 of average MMA or a proportion of 0.25 of  $MMB_{35}$ , which is 35% of the unfished level of MMB (i.e., MMB given  $F = F_{35}$ , which is 35% of the unfished spawning biomass per recruit), indicated by the vertical drops in the lines for the HCRs. The vertical drop in panel A does not reach zero because  $F$  attributable to bycatch can still occur in the groundfish fishery when the directed fishery is closed.